

SEQUENCE LISTING

<110> HERRMANN, RAFAEL
WONG, JAMES F.
LU, ALBERT L.
PRESNAIL, JAMES K.
LEE, JIAN-MING

<120> SCORPION TOXINS

<130> BB1102

<140> US/09/857,401

<141> 2001-06-01

<150> 60/110,590

<151> 1998-12-02

<160> 24

<170> Microsoft Office 97

<210> 1

<211> 177

<212> DNA

<213> Leiurus quinquestriatus

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gaagctggac tcatagacgt aagatgtttt gcatctcgtg aatgttgga agcttgcaga 120
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<210> 2

<211> 58

<212> PRT

<213> Leiurus quinquestriatus

<400> 2

Met Lys Ile Leu Ser Val Leu Leu Ile Ala Phe Ile Ile Cys Ser Ile
1 5 10 15

Asn Ile Cys Ser Glu Ala Gly Leu Ile Asp Val Arg Cys Phe Ala Ser
20 25 30

Arg Glu Cys Trp Glu Ala Cys Arg Lys Val Thr Gly Ser Gly Gln Gly
35 40 45

Lys Cys Gln Asn Asn Gln Cys Arg Cys Tyr
50 55

<210> 3

<211> 120

<212> DNA

<213> Leiurus quinquestriatus

<220>

<221> unsure

<222> (112)

<223> n = A, C, G, or T

<220>
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<400> 3
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<210> 4
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 <213> Leiurus quinquestriatus

<220>
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<400> 4
 Phe Ile Asn Ser Asn Val Glu Ala Ala Cys Gly Pro Gly Cys Arg Ser
 1 5 10 15
 Ser Cys Gln Gln Ser Gly Asn Ser Gly Gly Lys Cys Ile Asn Gly Arg
 20 25 30
 Cys His Cys Tyr Pro Xaa Lys
 35

<210> 5
 <211> 90
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 <213> Leiurus quinquestriatus

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 aatgacaaat gcgtatgtga atctatatga 90

<210> 6
 <211> 29
 <212> PRT
 <213> Leiurus quinquestriatus

<400> 6
 Val Ser Cys Glu Asp Cys Pro Glu His Cys Ser Thr Gln Lys Ala Arg
 1 5 10 15
 Ala Lys Cys Asp Asn Asp Lys Cys Val Cys Glu Ser Ile
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<210> 7
 <211> 180
 <212> DNA
 <213> Leiurus quinquestriatus

<400> 7
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 aatgcagtgg gaattccagt gtcatgtata cattctcgtc aatgttgga accatgtaag 120
 aaagctggaa tgagatttgg aaaatgcatg aatcgcaa at gcgattgcac accaaagtga 180

<210> 8
 <211> 59
 <212> PRT
 <213> Leiurus quinquestriatus

<400> 8
 Met Lys Val Phe Phe Ala Val Leu Ile Thr Leu Phe Val Cys Ser Met
 1 5 10 15
 Ile Ile Gly Ile Asn Ala Val Gly Ile Pro Val Ser Cys Ile His Ser
 20 25 30
 Arg Gln Cys Trp Glu Pro Cys Lys Lys Ala Gly Met Arg Phe Gly Lys
 35 40 45
 Cys Met Asn Arg Lys Cys Asp Cys Thr Pro Lys
 50 55

<210> 9
 <211> 114
 <212> DNA
 <213> Leiurus quinquestriatus

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 gtaaataata atagcggaaa gtgtggtaat gacaaatgta tttgttatcc ataa 114

<210> 10
 <211> 37
 <212> PRT
 <213> Leiurus quinquestriatus

<400> 10
 Ile His Thr Asn Val Pro Cys Lys Asn Ser Gly Gln Cys Arg Pro Val
 1 5 10 15
 Cys Ile Lys Arg Val Asn Asn Asn Ser Gly Lys Cys Gly Asn Asp Lys
 20 25 30
 Cys Ile Cys Tyr Pro
 35

<210> 11
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 <213> Leiurus quinquestriatus

<400> 11
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 tgcatagaatt ggaaatgccg ctgttattcg 150

<210> 12
 <211> 50
 <212> PRT
 <213> Leiurus quinquestriatus

<400> 12
 Leu Ser Ser Ile Cys Ser Ile Val Gly Trp Ser Glu Ala Gln Phe Thr
 1 5 10 15

Asp Val Ser Cys Thr Thr Ser Lys Glu Cys Trp Ser Val Cys Glu Thr
 20 25 30

Leu Tyr Lys Thr Thr Arg Gly Lys Cys Met Asn Trp Lys Cys Arg Cys
 35 40 45

Tyr Ser
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<210> 13
 <211> 138
 <212> DNA
 <213> Leiurus quinquestriatus

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 tgcaattggt atccatga 138

<210> 14
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 <212> PRT
 <213> Leiurus quinquestriatus

<400> 14
 Met Met Ile Phe Cys Gln Gly Gln Lys Lys Ile Asn Tyr Arg Cys Asn
 1 5 10 15

Asn Ser Gly Glu Cys Ile Pro His Cys Ile Arg Ile Tyr Asn Thr Arg
 20 25 30

Ala Ala Lys Cys Ile Asn Lys Thr Cys Asn Cys Tyr Pro
 35 40 45

<210> 15
 <211> 180
 <212> DNA
 <213> Leiurus quinquestriatus

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 aacttgata aaacactcaa tgcaaagtgt atgaataata aatgccgctg ttattcgtaa 180

<210> 16
 <211> 59
 <212> PRT
 <213> Leiurus quinquestriatus

<400> 16
 Met Lys Ile Leu Ser Ala Leu Leu Leu Ala Leu Ile Ile Cys Ser Ile
 1 5 10 15

Val Gly Trp Ser Thr Ala Gln Phe Thr Gln Val Ser Cys Ser Ala Ser
 20 25 30

Asp Gln Cys Trp Leu Val Cys Gln Asn Leu Tyr Lys Thr Leu Asn Ala
 35 40 45

Lys Cys Met Asn Asn Lys Cys Arg Cys Tyr Ser
50 55

<210> 17
<211> 36
<212> PRT
<213> Leiurus quinquestriatus

<400> 17
Gly Leu Ile Asp Val Arg Cys Tyr Asp Ser Arg Gln Cys Trp Ile Ala
1 5 10 15

Cys Lys Lys Val Thr Gly Ser Thr Gln Gly Lys Cys Gln Asn Lys Gln
20 25 30

Cys Arg Cys Tyr
35

<210> 18
<211> 38
<212> PRT
<213> Leiurus quinquestriatus

<400> 18
Gly Val Pro Ile Asn Val Lys Cys Thr Gly Ser Pro Gln Cys Leu Lys
1 5 10 15

Pro Cys Lys Asp Ala Gly Met Arg Phe Gly Lys Cys Ile Asn Gly Lys
20 25 30

Cys His Cys Thr Pro Lys
35

<210> 19
<211> 29
<212> PRT
<213> Leiurus quinquestriatus

<400> 19
Val Ser Cys Glu Asp Cys Pro Asp His Cys Ser Thr Gln Lys Ala Arg
1 5 10 15

Ala Lys Cys Asp Asn Asp Lys Cys Val Cys Glu Pro Ile
20 25

<210> 20
<211> 59
<212> PRT
<213> Androctonus australis

<400> 20
Met Lys Val Phe Ser Ala Val Leu Ile Ile Leu Phe Val Cys Ser Met
1 5 10 15

Ile Ile Gly Ile Asn Ala Val Arg Ile Pro Val Ser Cys Lys His Ser
20 25 30

Gly Gln Cys Leu Lys Pro Cys Lys Asp Ala Gly Met Arg Phe Gly Lys
35 40 45

Cys Met Asn Gly Lys Cys Asp Cys Thr Pro Lys
50 55

<210> 21
<211> 37
<212> PRT
<213> Tityus serrulatus

<400> 21
Val Phe Ile Asn Ala Lys Cys Arg Gly Ser Pro Glu Cys Leu Pro Lys
1 5 10 15

Cys Lys Glu Ala Ile Gly Lys Ala Ala Gly Lys Cys Met Asn Gly Lys
20 25 30

Cys Lys Cys Tyr Pro
35

<210> 22
<211> 37
<212> PRT
<213> Leiurus quinquestriatus

<400> 22
Gln Phe Thr Asn Val Ser Cys Thr Thr Ser Lys Glu Cys Trp Ser Val
1 5 10 15

Cys Gln Arg Leu His Asn Thr Ser Arg Gly Lys Cys Met Asn Lys Lys
20 25 30

Cys Arg Cys Tyr Ser
35

<210> 23
<211> 45
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:NCBI gi No. 208161

<400> 23
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Thr Ser Lys Glu Cys Trp Ser Val Cys Gln Arg Leu His Asn Thr Ser
20 25 30

Arg Gly Lys Cys Met Asn Lys Lys Cys Arg Cys Tyr Ser
35 40 45

<210> 24
<211> 37
<212> PRT
<213> Leiurus quinquestriatus

<400> 24
Gln Phe Thr Gln Glu Ser Cys Thr Ala Ser Asn Gln Cys Trp Ser Ile
1 5 10 15

Cys Lys Arg Leu His Asn Thr Asn Arg Gly Lys Cys Met Asn Lys Lys
20 25 30

Cys Arg Cys Tyr Ser
35